

FIG. 1

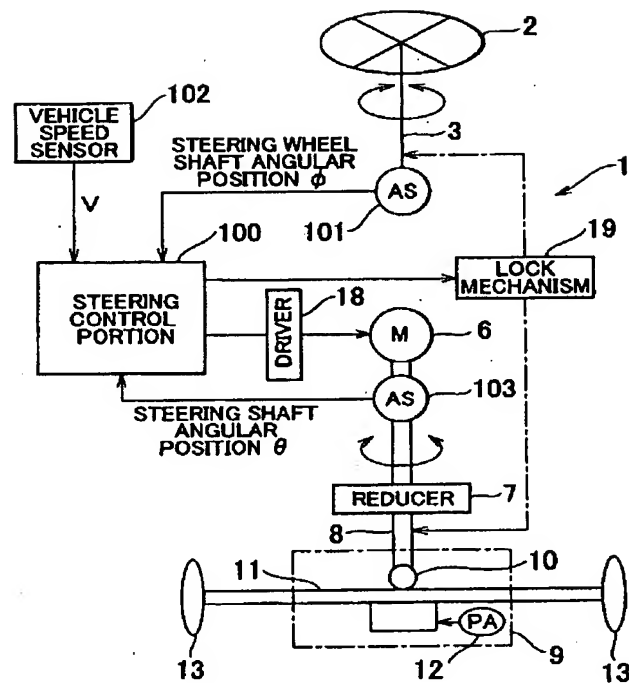


FIG. 2

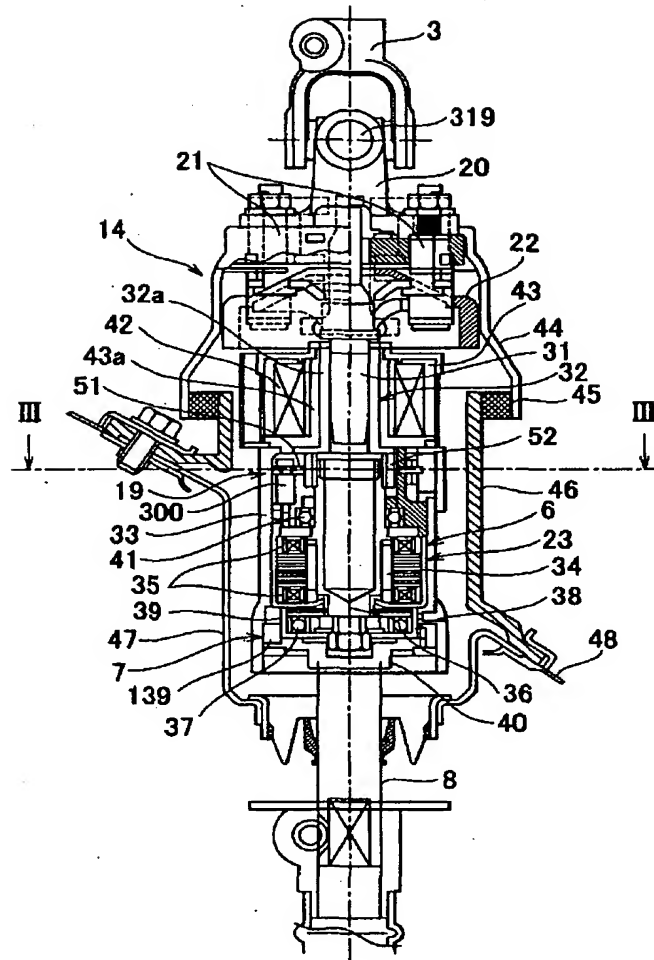


FIG. 3

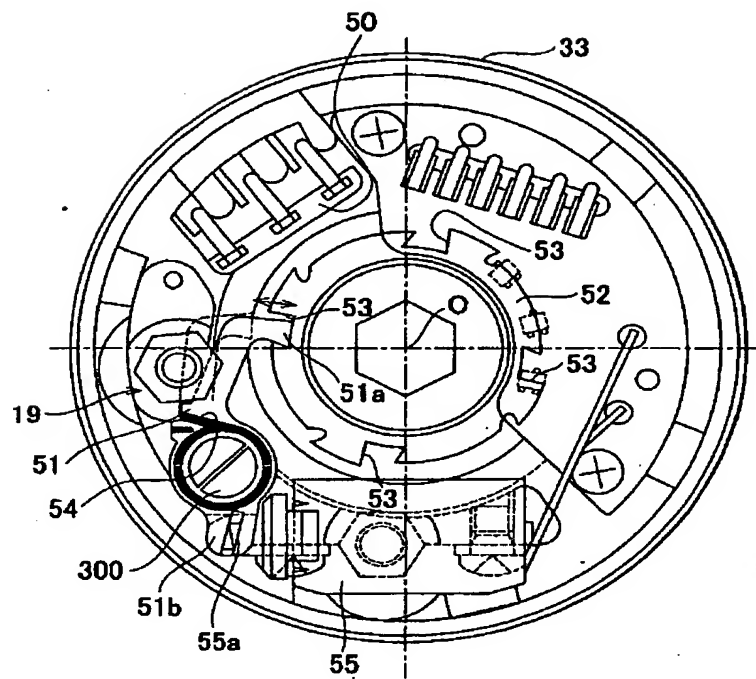


FIG. 4

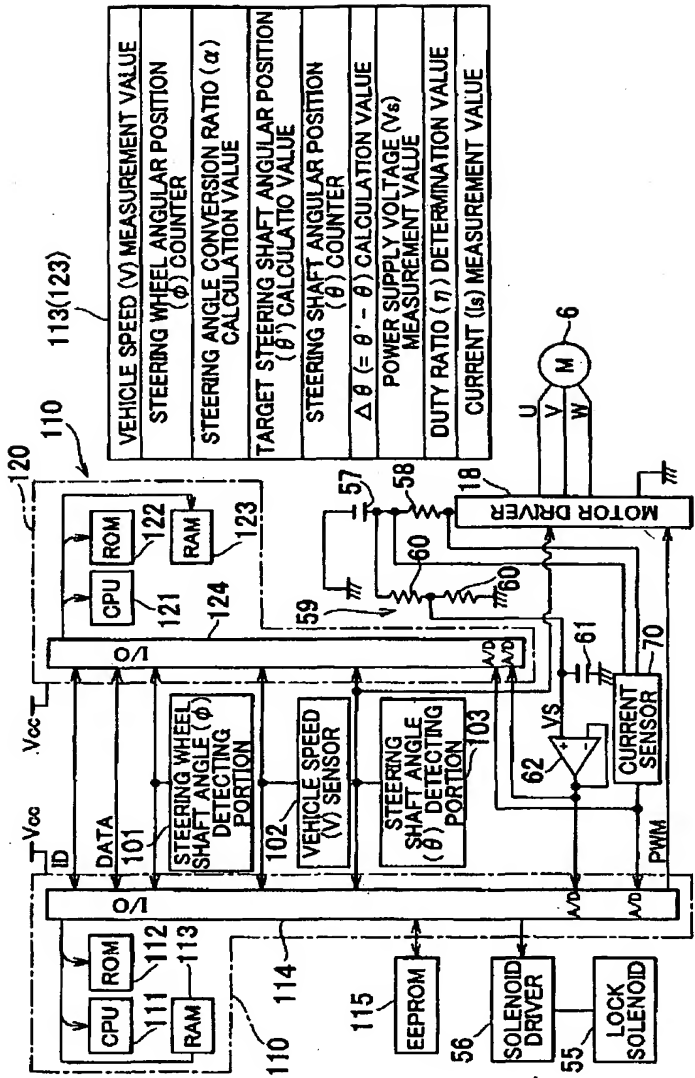


FIG. 5

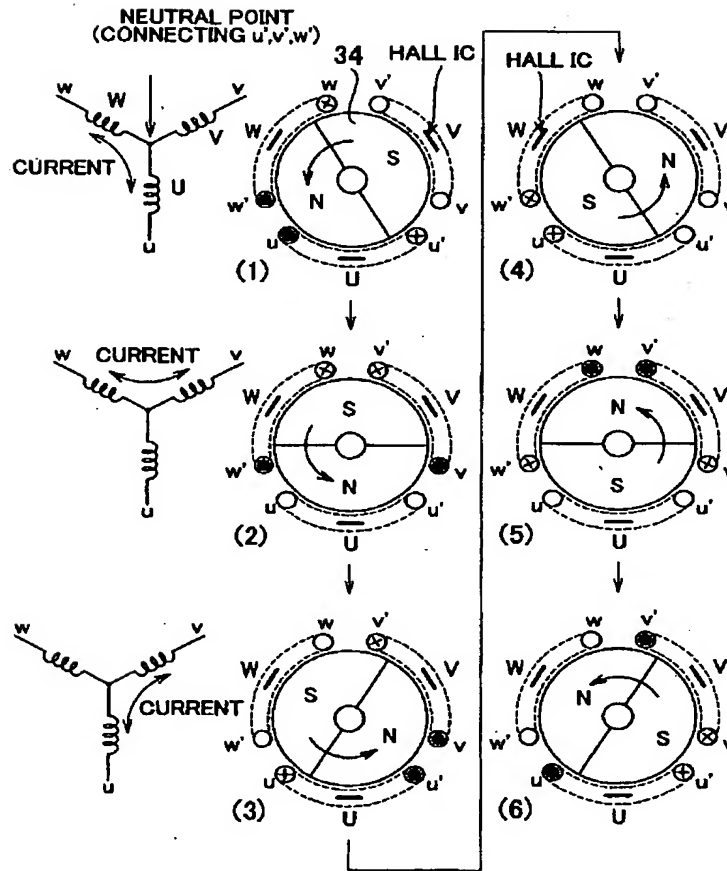


FIG. 6

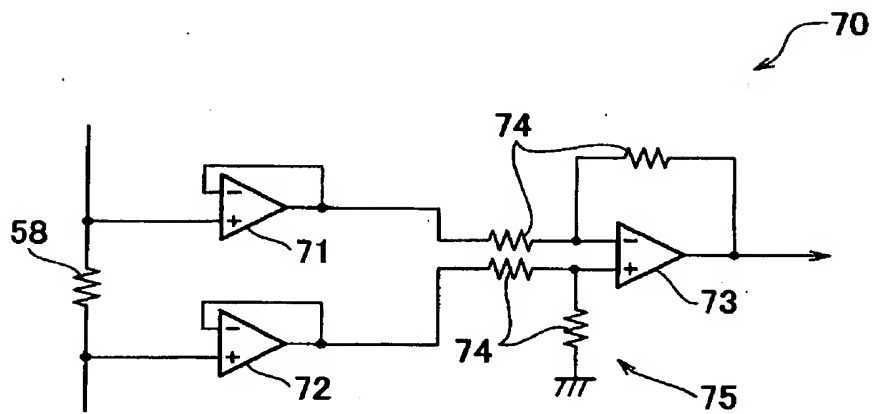


FIG. 7

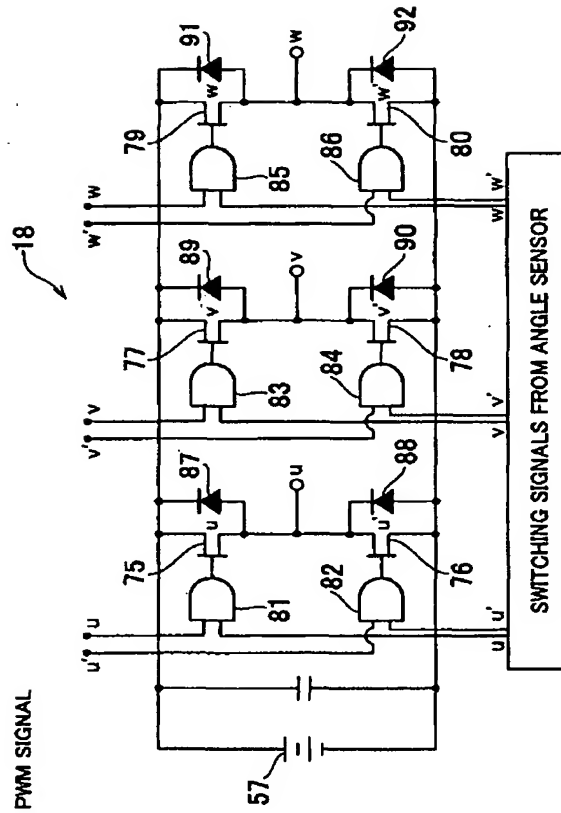


FIG. 8A

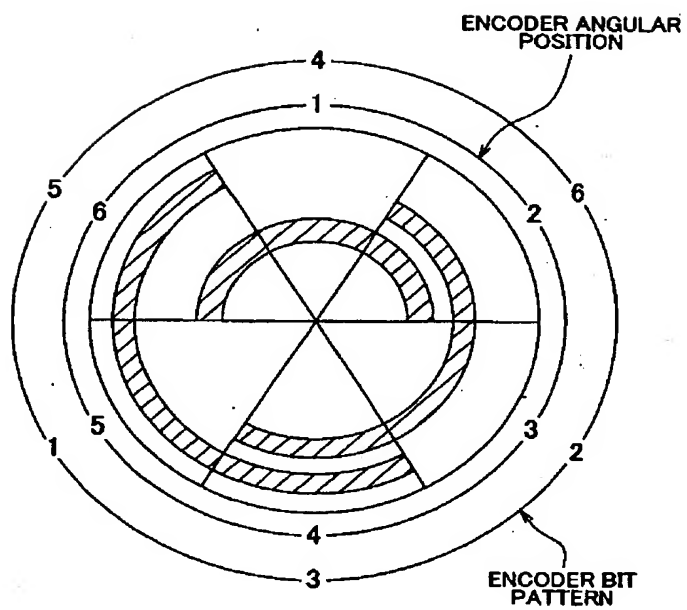


FIG. 8B

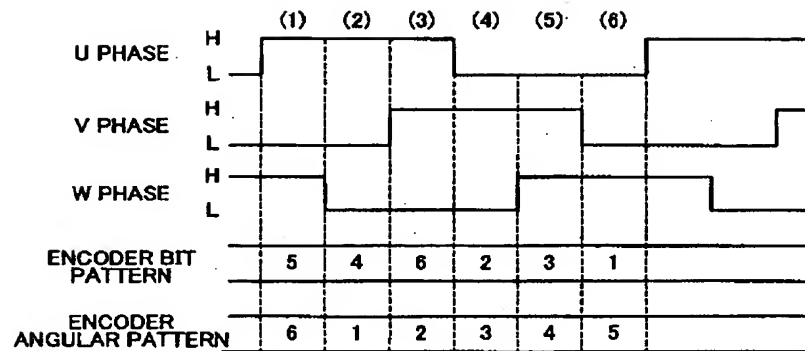


FIG. 9

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VEHICLE SPEED (V)	V ₁	V ₂	V ₃	V _n
STEERING ANGLE CONVERSION RATIO (α)	α_1	α_2	α_3	α_n

$$\alpha = \theta / \phi$$

ϕ : STEERING WHEEL SHAFT
ANGULAR POSITION
 θ : STEERING SHAFT
ANGULAR POSITION

FIG. 10

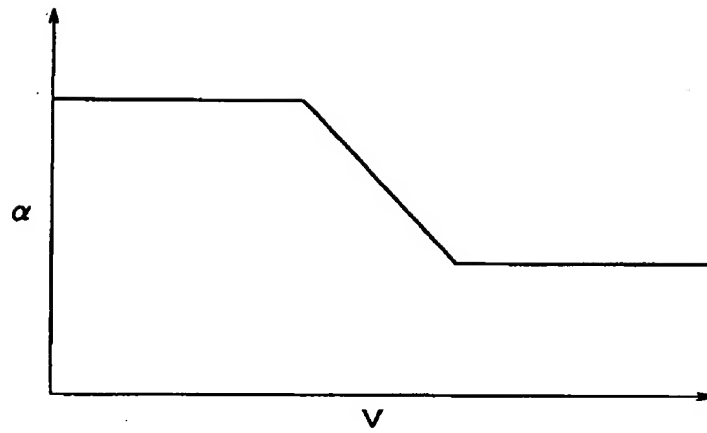


FIG. 11

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V_s $\Delta\theta$	V_{s1}	V_{s2}	V_{s3}	V_{s4}	...	V_{sn}
$\Delta\theta_1$	η_{11}	η_{12}	η_{13}	η_{14}	...	η_{1n}
$\Delta\theta_2$	η_{21}	η_{22}	η_{23}	η_{24}	...	η_{2n}
$\Delta\theta_3$	η_{31}	η_{32}	η_{33}	η_{34}	...	η_{3n}
$\Delta\theta_4$	η_{41}	η_{42}	η_{43}	η_{44}	...	η_{4n}
\vdots	\vdots	\vdots	\vdots	\vdots	\vdots	\vdots
$\Delta\theta_m$	η_{m1}	η_{m2}	η_{m3}	η_{m4}	...	η_{mn}

η : DUTY RATIO
 $\Delta\theta = \theta' - \theta$

θ' : TARGET STEERING SHAFT
ANGULAR POSITION
 θ : CURRENT STEERING SHAFT
ANGULAR POSITION

FIG. 12

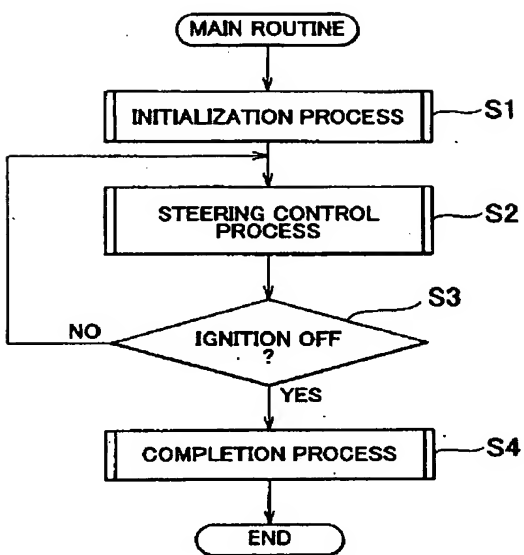


FIG. 13

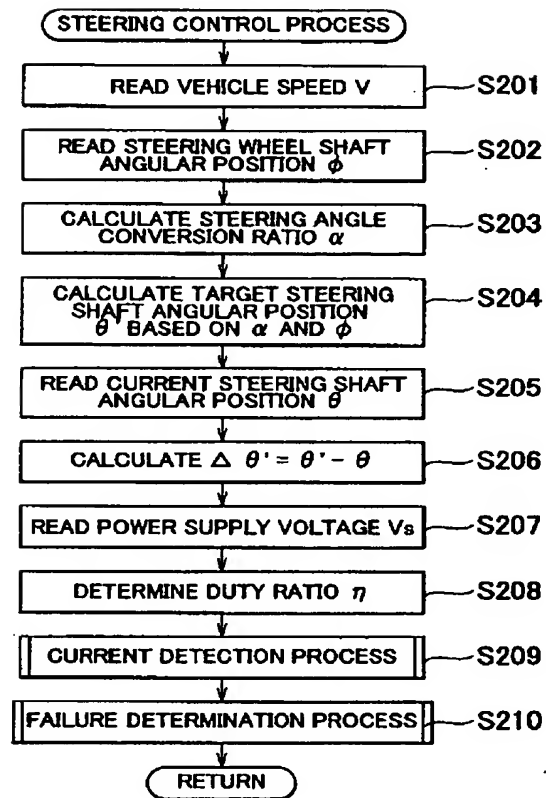


FIG. 14

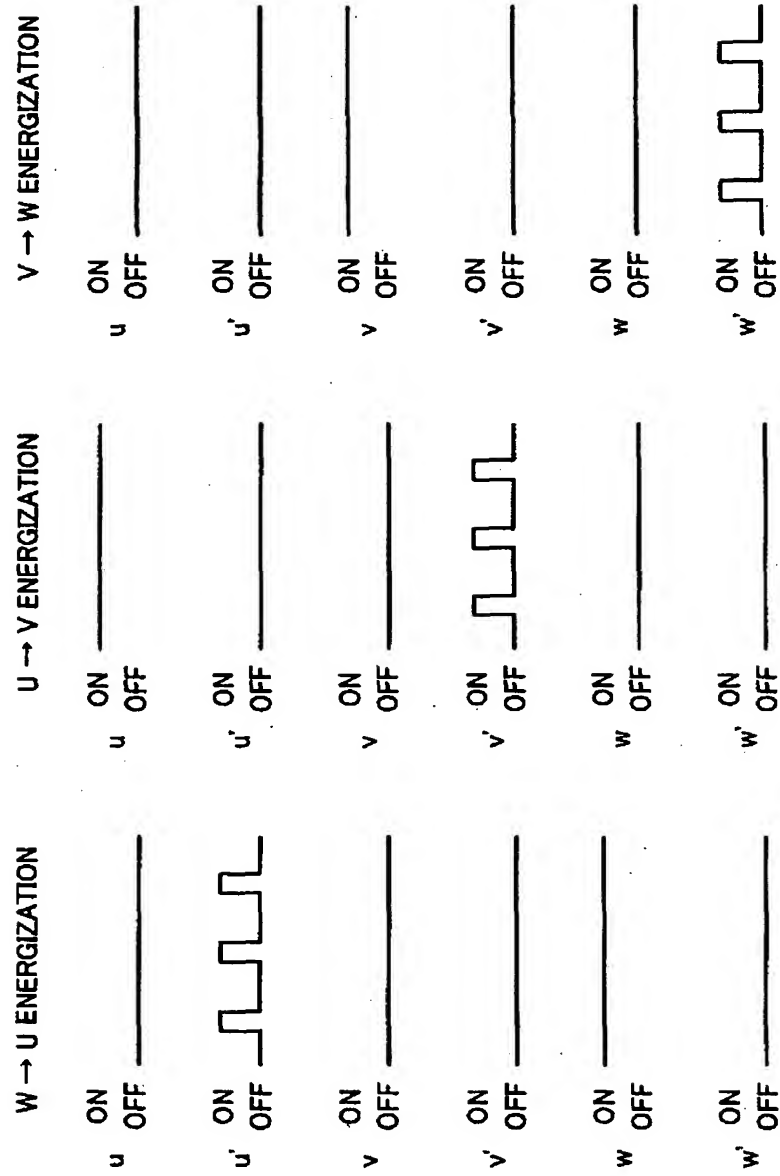


FIG. 15

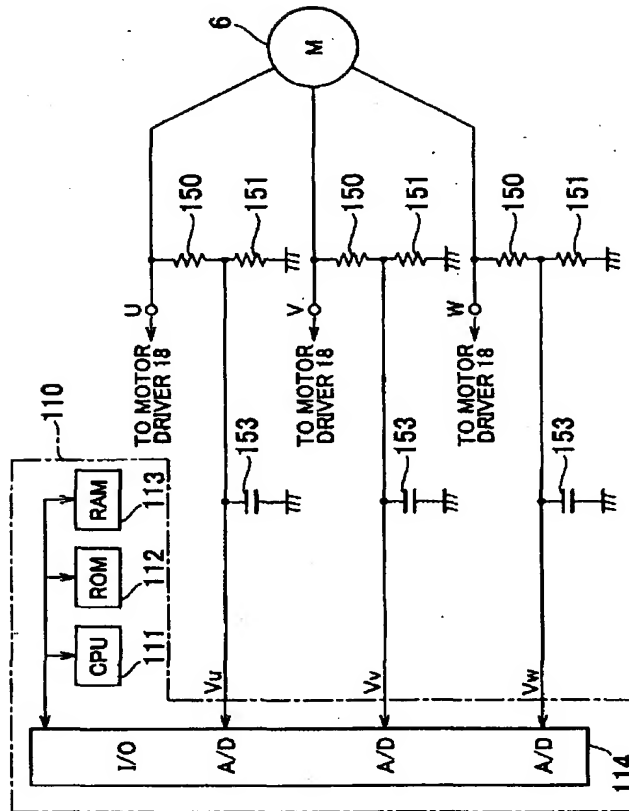


FIG. 16

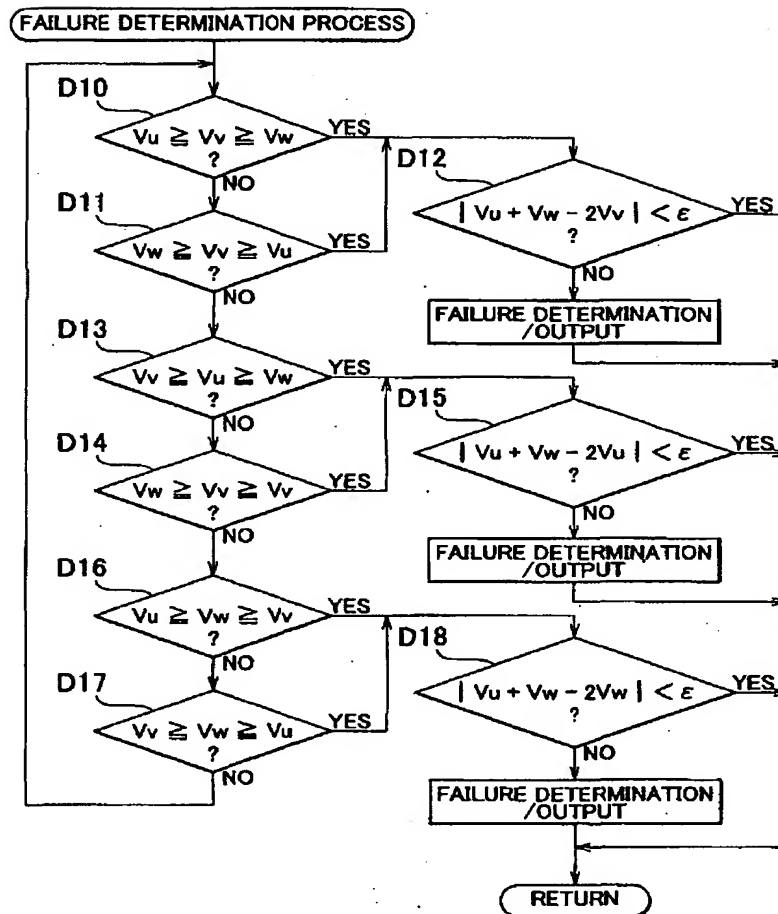


FIG. 17

